

(51) Internationale Patentklassifikation ⁶ :C07B 53/00, C07C 217/58, C07D 491/06
// (C07D 491/06, 307:00, 223:00)

A1

(11) Internationale Veröffentlichungsnummer: WO 96/12692

(43) Internationales
Veröffentlichungsdatum:

2. Mai 1996 (02.05.96)

(21) Internationales Aktenzeichen: PCT/AT95/00208

(22) Internationales Anmeldedatum: 23. Oktober 1995 (23.10.95)

(30) Prioritätsdaten:

A 1980/94	21. Oktober 1994 (21.10.94)	AT
08/487,102	7. Juni 1995 (07.06.95)	US

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(81) Bestimmungsstaaten: AM, AT, AU, BB, BG, BR, BY, CA,
CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP,
KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
SI, SK, TJ, TM, TT, UA, UG, US, UZ, VN, europäisches
Patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
MC, NL, PT, SE), OAPI Patent (BF, BJ, CF, CG, CI, CM,
GA, GN, ML, MR, NE, SN, TD, TG), ARIPO Patent (KE,
LS, MW, SD, SZ, UG).

Veröffentlicht

Mit internationalem Recherchenbericht.

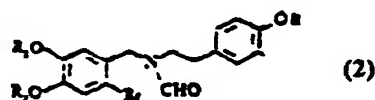
(54) Title: PROCESS FOR PRODUCING DERIVATIVES OF 4a,5,9,10,11,12,-HEXAHYDRO-6H-BENZOFURO[3a,3,2-
ef][2]BENZAZEPINE(54) Bezeichnung: VERFAHREN ZUM HERSTELLEN VON DERIVATEN DES 4a,5,9,10,11,12,-HEXAHYDRO-6H-
BENZOFURO[3a,3,2-ef][2]BENZAZEPINS

(57) Abstract

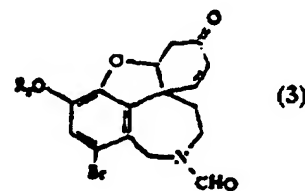
The proposal is for a process
for producing derivatives of
4a,5,9,10,11,12,-hexahydro-6H-
benzofuro[3,2-ef][2]benzazepine

facilitating in particular the production
of galanthamine (6) via the novel
bromine-N-demethyl galanthamine (4)
and the novel bromine galanthamine (5). In this process, the compound
(2) is oxidatively cyclised into
the compound (3). The compound
(3) is diastereo-selectively reduced
by L-selectrides to the novel
bromine-N-demethyl galanthamine
(4) without the formation of detectable
quantities of epibromine-N-demethyl
galanthamine. The novel bromine
galanthamine (5) is obtained by
methylation, from which by separation

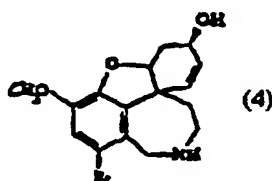
of bromine (+/-) galanthamine (6) is produced. Pure enantiomers can be demonstrated by precipitation as a salt of a chiral acid (especially
a tartrate). The process shown in the reaction diagram below gives high yields and pure products at all stages and can thus be conducted
on the industrial scale.



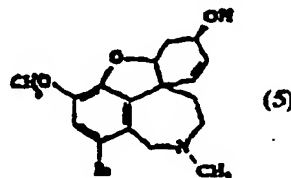
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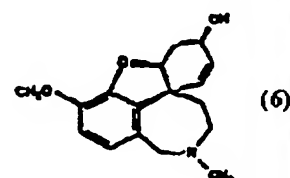
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